

COLLEMBOLA ON FLOWERS ON BANKS ISLAND, N. W. T.

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Two species of *Collembola*, *Entomobrya comparata* Folsom and *Corynothrix borealis* Tullberg (*Entomobryiidae*) were collected from the flowers of *Lesquerella arctica* (Wormskjöld) S. Watson (*Cruciferae*) where they were feeding on pollen directly from the anthers. The observations compare well with those reported earlier from northern Ellesmere Island.

Deux espèces de collembole, *Entomobrya comparata* Folsom et *Corynothrix borealis* Tullberg (*Entomobryiidea*) ont été recueillies alors qu'ils se nourrissaient du pollen directement des anthères des fleurs de *Lesquerella arctica* (Wormskjöld) S. Watson (*Cruciferae*). Ces observations sont en accord avec celles rapportées précédemment du nord de l'île d'Ellesmere.

Kevan and Kevan (1970) have reviewed the literature on *Collembola* as visitors to flowers and pollen feeders, and reported on observations from around Lake Hazen, Ellesmere Island, N. W. T. On 5 July 1970 on Banks Island, N. W. T., I collected 11 *Collembola* associated with the flowers of *Lesquerella arctica* (Wormskjöld) S. Watson (*Cruciferae*), the same plant species as for the Lake Hazen *Collembola*-flower association. The following observations were made on a stony well-drained ridge of the coastal escarpment 2 km east of the village of Sachs Harbour (71° 59'N., 125° 11'W.). *Lesquerella arctica* was flowering elsewhere, but *Collembola* were not found in association.

Two specimens of *Entomobrya comparata* Folsom (*Entomobryiidae*) were collected and observed, in the same circumstances as described for this species around Lake Hazen. Another was seen, but it escaped. Eight specimens of the darker *Corynothrix borealis* Tullberg (*Entomobryiidae*) were collected from the flowers. Of these, six were inside the corolla and two were crawling on the outside of the petals. One other was found on the ground beside a flowering plant. Of the six within the corollas, three were watched as they fed on pollen directly from the anthers. Their postures were different from those assumed by *E. comparata*. They gripped the anther and filament of the stamen being fed at so that their bodies were parallel to the filament, rather than curled around the anther as *E. comparata*. One other individual of *C. borealis* was in a similar posture but its mouthparts were applied to the stigma and its body parallel to the style.

Dr. K. Christiansen, Grinnell College, Iowa, kindly identified the specimens for me and examined their gut contents according to my suggestions. Both specimens of *E. comparata* and seven of the specimens of *C. borealis* had pollen of *L. arctica* in their guts, and most were well stuffed. One individual of *C. borealis* had also ingested some xylem vessel elements and fungal hyphae.

The dates of these records coincide almost exactly with the suggested "sensitive period" for *E. comparata* around Lake Hazen (Kevan and Kevan, 1970). Data are insufficient to make a statement about *C. borealis* in this regard. *Corynothrix borealis* is the first species in this genus recorded visiting flowers and feeding on pollen and fits within the group of light coloured *Collembola* (albeit a little browner than *E. comparata*) in exposed flowers where they would be least conspicuous. The day on which the Banks Island collection was made was heavily overcast, so that there would have been no raised intra-floral temperature to hold the *Collembola* in the flowers.

REFERENCE

- Kevan, P. G. and D. K. McE. Kevan. 1970. *Collembola* as pollen feeders and flower visitors with observations from the high arctic. *Quaest. ent.* 6:311-326.

